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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/771,649	02/03/2004	Hartmut Ahrens	514413-3945	3687
<div>7590 04/05/2007 FROMMER, LAWRENCE &amp; HAUG LLP 745 Fifth Avenue New York, NY 10151</div>			<div>EXAMINER BALASUBRAMANIAN, VENKATARAMAN</div>	
			<div>ART UNIT 1624</div>	<div>PAPER NUMBER</div>
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		04/05/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/771,649

Applicant(s)

AHRENS ET AL.

Examiner

Venkataraman Balasubramanian

Art Unit

1624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 and 11-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 11-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

Applicants' response, which included cancellation of claim 7-10, addition of new claims 11-15 and amendment to claims 2-6, filed on 1/29/2007, is made of record. Claims 1-6 and 11-15 are now pending. In view of applicants' response the 112 second paragraph rejection of claims 2-7 along with a 101 rejection of claim 7, made in the previous office action have been obviated. In view of applicants pointing out that the copending application has a disubstituted triazine while the instant claims have trisubstituted triazine, the obviousness double patenting rejection of claims 1-7 made in the previous office action has been deemed as obviated.

However, the following 102 and 103 rejections made in the previous office action are maintained.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6 and 11-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Saito et al., EP 0864567.

Saito et al. teaches several diaminosubstituted triazine compounds, composition, process of making and method of use as herbicides, which include compound, composition, process and method of use claimed in the instant claims. See formula I shown in page 2 and note the definition of X, Y, R and n. See also formula I' in page 6.

Art Unit: 1624

Note with the given definition of R, X, Y, the compounds taught by Saito et al. include instant compounds. See pages 5-9 for various preferred embodiments and process of making. Particularly, see Table 1-33 on pages 12-42 for examples of compounds made.

This rejection is same as made in the previous office action but now excludes cancelled claim 7 and includes newly added claims 11-15.

Applicants' argument to overcome this rejection is not persuasive.

First of all, chirality is not applicants' invention and there is no support in the specification to show that this application relates to such an invention.

Possible existence of chiral center is known in the art and the references cited in the applicants' own IDS clearly support this.

The fact that Saito et al. is silent about the chiral center does not negate the existence of chiral center in the compounds disclosed by Saito et al.,

If there is no chiral center, it is not clear how applicants are asserting that Saito et al., teaches only racemic mixtures.

Applicants also argued that Saito fails to describe the applicants' claimed invention with "sufficient clarity and detail".

"An anticipating reference must describe the patented subject matter with sufficient clarity and detail to establish that the subject matter existed in the prior art and that such existence would be recognized by persons of ordinary skill in the field of the invention." See *In re Spada*, 911 F.2d 705, 708, 15 USPQ 1655, 1657 (Fed. Cir. 1990); *Diversitech Corp. v. Century Steps, Inc.*, 850 F.2d 675, 678, 7 USPQ2d 1315, 1317 (Fed. Cir. 1988).

This argument is not found persuasive as the cited case law clearly states, "the subject matter existed in the prior art and that such existence would be recognized by persons of ordinary skill in the field of the invention." In the instant case, existence of chirality as a subject matter is clearly supported by the references cited by the applicants and one trained in the art would recognize such an existence of chirality in the compounds taught by Saito et al.

Hence, this rejection is deemed as proper and is maintained.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

Art Unit: 1624

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-6 and 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saito et al., EP 0864567.

Teachings of Saito et al. as discussed in the above 102 rejection is incorporated herein. As noted above, Saito et al. teaches several diaminosubstituted triazine compounds, composition, process of making and method of use as herbicides, which include compound, composition, process and method of use claimed in the instant claims. Saito et al., does not teach all the compounds generically embraced in Formula I, with various X, Y and R choices. However, Saito et al. teaches equivalency of exemplified compounds with those generically claimed. Thus it would have been obvious to one having ordinary skill in the art at the time of the invention was made to make compounds variously substituted in triazine ring as permitted by the reference and expect resulting compounds (instant compounds) to possess the uses taught by the art in view of the equivalency teaching outline above.

Claims 1-6 and 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lorenz et al. WO 97/31904.

Lorenz et al. teach several 2-amino and 4-bicycloamino-1,3,5-triazines which generically include instant compounds for the same use as herbicides and plant growth regulators. See page 2 formula I and note the definition of R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup>, R<sup>6</sup>, Y<sup>1</sup>, Y<sup>2</sup>,

Art Unit: 1624

$Y^3$  and  $n$ . Especially note when  $Y^1$  is a direct bond,  $R^3$  is  $Z^1-R^7$  wherein  $Z^1$  is a direct bond and  $R^7$  is hydrogen, the compounds taught by Lorenz et al. include instant compounds. See pages 3-22 for various preferred embodiments. See also the process of making shown on pages 22-33, which include the same as claimed in the instant claims. See Table I, pages 50-64, examples 1-658 for compounds made. Especially see page 53, compound 158, page 55, compounds 258 & 267, page 56, compound 284, page 57, compound 336, page 58, compound 388, page 59, compound 440, page 60, compound 492 and page 63, compound 590. Note all these compounds have a methyl group in the 6-position of the triazine.

Lorenz et al teaches equivalency of the exemplified compounds shown in Table with those generically claimed for compound of formula I. See page 2 formula I and note the definition of  $R^1$ ,  $R^2$ ,  $R^3$ ,  $R^4$ ,  $R^5$ ,  $R^6$ ,  $Y^1$ ,  $Y^2$ ,  $Y^3$  and  $n$ . Especially note when  $Y^1$  is a direct bond,  $R^3$  is  $Z^1-R^7$  wherein  $Z^1$  is a direct bond and  $R^7$  is hydrogen, the compounds taught by Lorenz et al. include instant compounds.

Thus, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to make compounds variously substituted in the triazine ring including various bicycloamino group at 4-position as permitted by the reference and expect resulting compounds to possess the uses taught by the art in view of the equivalency teaching outline above.

Thus it would have been obvious to one skilled in the art at the time of the invention was made to expect instant compounds to possess the utility taught by the applied art in view of the close structural similarity outlined above.

The above two rejections are same as made in the previous office action but now excludes cancelled claim 7 and includes newly added claims 11-15.

Applicants' argument is same as made for the 102 rejection and is deemed as not persuasive for reasons stated above. To repeat: First of all, chirality is not applicants' invention and there is no support in the specification to show that this application relates to such an invention.

Possible existence of chiral center is known in the art and the references cited in the applicants' own IDS clearly support this.

The fact that Saito et al. is silent about the chiral center does not negate the existence of chiral center in the compounds disclosed by Saito et al.,

If there is no chiral center, it is not clear how applicants are asserting that Saito et al., teaches only racemic mixtures.

Applicants also argued that Saito fails to describe the applicants' claimed invention with "sufficient clarity and detail".

"An anticipating reference must describe the patented subject matter with sufficient clarity and detail to establish that the subject matter existed in the prior art and that such existence would be recognized by persons of ordinary skill in the field of the invention." See *In re Spada*, 911 F.2d 705, 708, 15 USPQ 1655, 1657 (Fed. Cir. 1990); *Diversitech Corp. v. Centuray Steps, Inc.*, 850 F.2d 675, 678, 7 USPQ2d 1315, 1317 (Fed. Cir. 1988).

This argument is not found persuasive as the cited case law clearly states, "the subject matter existed in the prior art and that such existence would be recognized by



Art Unit: 1624

persons of ordinary skill in the field of the invention." In the instant case, existence of chirality as a subject matter is clearly supported by the references cited by the applicants and one trained in the art would recognize such an existence of chirality in the compounds taught by Saito et al.

Hence, these rejections are deemed as proper and are maintained.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-6 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-9 of copending Application No. 10/368,856. Although the conflicting claims are not identical, they are not patentably distinct from each other because the subject matter, namely, the aminobicycloaminotriazine, composition and method of use claimed in the instant claims

Art Unit: 1624

overlap with the subject matter, namely, the amino-bycycloaminotriazine, composition and method of use claimed in the copending application 10/368,856. Thus it would have been obvious to one skilled in the art at the time of the invention was made to expect instant compounds to possess the utility taught by the applied art in view of the close structural similarity outlined above.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

This rejection is same as made in the previous office action. Applicants' traversal is not persuasive. Applicants have argued that the copending application discloses disubstituted triazine core while instant application embraces trisubstituted triazine core. Contrary to applicants urging, the instant compounds are obvious variant of the compounds of the copending application. Note when instant  $R^1$ ,  $R^2$  and  $R^3$  are hydrogen then the third substituents in the triazine ring is a methyl group.

While said compound doesn't anticipate the scope of instant claims, they are very closely related, being compounds that differ in H in the reference on vs. methyl in the instant on the triazine core. However, compounds that differ only by  $CH_3$  Vs H are not deemed patentably distinct absent evidence of superior or unexpected properties. See *In re Wood* 199 USPQ 137; *In re Lohr* 137 USPQ 548.

Thus it would have been obvious to one skilled in the art at the time of the invention was made to expect instant compounds to possess the utility taught by the applied art in view of the close structural similarity outlined above.

Art Unit: 1624

Contrary to applicants' urging, the bicyclic core claimed in the copending application includes instant bicyclic core. See Y<sup>1</sup>, Y<sup>2</sup> and m choices.

Finally, the chirality is an inherent property and is clearly recognized in copending application (page 12) and one trained in the art would also know that there could be chiral center in the bicyclic amine.

Hence, this rejection is proper and is maintained.

### **Conclusion**

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication from the examiner should be addressed to Venkataraman Balasubramanian (Bala) whose telephone number is (571) 272-0662. The examiner can normally be reached on Monday through Thursday from 8.00 AM to 6.00 PM. The Supervisory Patent Examiner (SPE) of the art unit 1624 is James O. Wilson, whose telephone number is 571-272-0661. The fax phone number for

Art Unit: 1624

the organization where this application or proceeding is assigned (571) 273-8300. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-1600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAG. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-2 17-9197 (toll-free).

*Venkataraman Balasubramanian*  
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3/29/2007